Alopecia

The medical term for hair loss is alopecia.

Due to hormonal changes, irritation or damage, some hair follicles have a shorter growth phase and produce thinner, shorter hair shafts. Your hair goes through a cycle of growth and rest. The course of each cycle varies by individual. But in general, the growth phase of scalp hair, known as anagen, typically lasts two to three years. During this time, your hair grows just less than 1/2 inch (1 centimeter) a month. The resting phase is called telogen. This phase typically lasts three to four months. At the end of the resting phase, the hair strand falls out and a new one begins to grow in its place. Once a hair is shed, the growth stage begins again.

Most people normally shed 50 to 100 hairs a day. But with about 100,000 hairs in the scalp, this amount of hair loss shouldn't cause noticeable thinning of the scalp hair.

There are many reasons alopecia affects individuals. Primarily we have highlighted the oncologic reason and did reference some of the other information.

* **Medical treatments.** Undergoing chemotherapy or radiation therapy may cause you to develop alopecia. Under these conditions, healthy, growing (anagen) hairs can be affected. After your treatment ends, your hair typically begins to regrow.
* **Anagen effluvium.** In this type of hair loss, actively growing hairs in the anagen state are affected most often by chemotherapeutic drugs given to fight cancer or lymphoma. Hair loss starts soon after beginning therapy and is more extensive than in the telogen effluvium state. In the weeks after the therapy has been completed, the hair cycles re-establish themselves, although the hair may not return as thickly as before chemotherapy.

TREATMENT

Baldness, whether permanent or temporary, can't be cured. But hair loss treatments are available to help promote hair growth or hide hair loss. For some types of alopecia, hair may resume growth without any treatment.

* **Medication**  
  The effectiveness of medications used to treat alopecia depends on the cause of hair loss, extent of the loss and individual response. Generally, treatment is less effective for more extensive cases of hair loss.

The types of drugs for treatment of alopecia that are approved by the Food and Drug Administration include:

* **Minoxidil (Rogaine).** This over-the-counter (nonprescription) medication is approved for the treatment of androgenetic alopecia and alopecia areata. Minoxidil is a liquid or foam that you rub into your scalp twice daily to grow hair and to prevent further loss. Some people experience some hair regrowth or a slower rate of hair loss or both. Minoxidil is available in a 2 percent solution and in a 5 percent solution.

New hair resulting from minoxidil use may be thinner and shorter than previous hair. But there can be enough hair growth for some people to hide their bald spots and have the new hair blend with existing hair. New hair stops growing soon after you discontinue the use of minoxidil. It may take 12 weeks for new hair to start growing. If you experience minimal results within six months, your doctor may recommend discontinuing use. Side effects can include irritation of the scalp.

* **Finasteride (Propecia).** This prescription medication to treat male-pattern baldness is taken daily in pill form. Many men taking finasteride experience a slowing of hair loss, and some may show some new hair growth. Positive results may take several months. Finasteride works by stopping the conversion of testosterone into dihydrotestosterone (DHT), a hormone that shrinks hair follicles and is an important factor in male hair loss. As with minoxidil, the benefits of finasteride stop if you stop using it. Rare side effects of finasteride include diminished sex drive and sexual function. The FDA has also warned that in some men there's an increased risk, though low, of getting a serious form of prostate cancer (high-grade prostate cancer). If you’re concerned about your risk of developing prostate cancer, talk with your doctor.

**Finasteride is not approved for use by women.** In fact, it poses significant danger to women of childbearing age. If you're a pregnant woman, don't even handle crushed or broken finasteride tablets because absorption of the drug may cause serious birth defects in male fetuses.

* **Corticosteroids.** Injections of cortisone into the scalp can treat alopecia areata. Treatment is usually repeated monthly. Doctors sometimes prescribe corticosteroid pills for extensive hair loss due to alopecia areata. New hair may be visible four weeks after the injection. Ointments and creams also can be used, but they may be less effective than injections.
* **Anthralin (Dritho-Scalp).** Available as either a cream or an ointment, anthralin is a synthetic, tarry substance that you apply to your scalp and wash off daily. It's typically used to treat psoriasis, but doctors can prescribe it to treat other skin conditions. Anthralin may stimulate new hair growth for cases of alopecia areata. It may take up to 12 weeks for new hair to appear.

**Surgery**  
The goal of surgery is to efficiently use your existing hair to "cover lost ground."

* **Hair transplant** techniques, such as punch grafts, minigrafts, micrografts, slit or strip grafts, are available to treat androgenetic alopecia when more-conservative measures have failed. During these techniques, a dermatologist or cosmetic surgeon takes tiny plugs of skin, each containing one to a few hairs, from the back or sides of your scalp. The plugs are then implanted into the bald sections. Several transplant sessions may be needed, as hereditary hair loss progresses with time.
* **Scalp reduction,** as the name implies, means decreasing the area of bald skin on your head. Your scalp and the top part of your head may seem to have a snug fit. But the skin can become flexible and stretched enough for some of it to be surgically removed. After hairless scalp is removed, the space is closed with hair-covered scalp. Doctors can also fold hair-bearing skin over an area of bald skin in a scalp reduction technique called a flap. Scalp reduction can be combined with hair transplantation to fashion a natural-looking hairline in those with more extensive hair loss.

Surgical procedures to treat baldness are expensive and can be painful. Possible risks include infection and scarring. It will take six to eight months before the quality of the new hair can be properly evaluated.

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* **Wigs and hairpieces**  
  If you would like an alternative to medical treatment for your baldness or if you don't respond to treatment, you may want to consider wearing a wig or hairpiece. They can be used to cover either permanent or temporary hair loss. Quality, natural-looking wigs and hairpieces are available.

**Treatments and drugs**

[By Mayo Clinic staff](http://www.mayoclinic.com/health/AboutThisSite/AM00057)

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| [Photograph showing results of micrograft procedure](http://www.mayoclinic.com/health/medical/IM04294) | [Micrografts](http://www.mayoclinic.com/health/medical/IM04294) |

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Surgical procedures to treat baldness are expensive and can be painful. Possible risks include infection and scarring. It will take six to eight months before the quality of the new hair can be properly evaluated.

If you're interested in these procedures, consider only board-certified dermatologists, plastic surgeons or cosmetic surgeons, and check local and state medical boards for a record of patient complaints before choosing a doctor. Consult with this doctor to confirm the cause of your hair loss and review all treatment options, including nonsurgical ones, before proceeding with plans for surgery.

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[References](javascript:toggleDivSlide('link_references','references');)

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